

## CLAIMS

1. A Magnus type wind power generator comprising a horizontal rotary shaft that transmits a rotation torque to a power generating mechanism, a required number of rotary columns that are disposed radially from said horizontal rotary shaft, and driving motors that rotatively drive said respective rotary columns about axes thereof, wherein Magnus lift generated by interactions between the rotations of said respective rotary columns and wind power is caused to rotate said horizontal rotary shaft to drive said power generating mechanism, characterized in that at a predetermined position is provided air flow means that generates an air flow upon an outer peripheral surface of said rotary column so as to increase the Magnus lift.
2. The Magnus type wind power generator according to claim 1, wherein said air flow means is means that generates an air flow component at least parallel with an axis of said rotary column upon the outer peripheral surface of said rotary column.
- 15 3. The Magnus type wind power generator according to claim 1 or 2, wherein said air flow means is means that generates an air flow component parallel with the axis of said rotary column and in a direction departing from said horizontal rotary shaft upon the outer peripheral surface of said rotary column.
- 20 4. The Magnus type wind power generator according to claim 1 or 2, wherein said air flow means is means that generates an air flow component parallel with the axis of said rotary column and in a direction toward said horizontal rotary shaft upon the outer peripheral surface of said rotary column.
- 25 5. The Magnus type wind power generator according to claims 1 to 4, wherein said air flow means is a fin member formed upon the outer peripheral surface of said rotary column.
6. The Magnus type wind power generator according to claim 5, wherein the fin member serving as said air flow means is a rib in a spiral shape formed upon

the outer peripheral surface of said rotary column.

7. The Magnus type wind power generator according to any one of claims 1 to 7, wherein an end cap larger in diameter than said rotary column is provided upon an extreme end of said rotary column.

5 8. The Magnus type wind power generator according to claim 6 or 7, wherein the rib is constructed by a multi-streak spiral.

9. The Magnus type wind power generator according to claims 1 to 8, wherein a plurality of dimples are provided upon the outer peripheral surface of said rotary column.

10 10. The Magnus type wind power generator according to claim 6, wherein dimples or projections are formed upon an outer surface of an extreme end of said rib.

11. The Magnus type wind power generator according to claims 1 to 10, wherein said rotary column is supported for extension and contraction in the radial direction with respect to said horizontal rotary shaft.

15 12. The Magnus type wind power generator according to claims 1 to 11, wherein said driving motor the number of which is less than the required number of said rotary columns are used to drive rotatively said respective rotary columns simultaneously.